

157055



THE TIRE AND RIM ASSOCIATION, INC.

CROWN POINTE
175 MONTROSE WEST AVE., SUITE 150
COPLEY, OHIO 44321

PHONE: (330) 666-8121
FAX: (330) 666-8340

February 18, 2002

Docket Management, Room PL-401
400 Seventh Street, S. W.
Washington, DC 20590

Re: 49 CFR Parts 567, 571, and 574 and 575
Docket Number NHTSA-01-11157-12
Tire Safety Information
Notice of Proposed Rulemaking (NPRM)

DEPT. OF TRANSPORTATION
02 FEB 19 AM 9:39
BUDGETS

The Tire and Rim Association (TRA) is providing the following comments on the subject NPRM concerning Tire Safety Information. TRA is the technical standardizing organization for the tire, rim and valve manufacturers in the United States. Our membership includes all of the major manufacturers of tires, rim and wheels, valves and allied parts for use in the United States as well as affiliated foreign manufacturers. The TRA standards have provided technical guidance to these manufacturers and designers and manufacturers of wheeled vehicles for the past 99 years.

We are commenting primarily on the proposed revision to FMVSS 110 that omits the current requirement that the load rating of a passenger car tire when used on a light truck, van, SUV or trailer must be reduced by dividing by a factor of 1.10. This omission, which basically increases the load rating of passenger car tires on these types of vehicles by 10 %, would allow vehicle manufacturers to "downsize" or reduce inflation pressures on the tires for the very vehicles that we understand to be the object of the Tread Act activities. The Tire and Rim Association is definitely opposed to this proposal. This load adjustment has been a TRA Standard and practice since 1972 and was developed in conjunction with the NHTSA adoption of FMVSS 120. It was developed because of the use of a passenger car tire in a service different and more severe than "normal" passenger car service.

We do not understand why, nor see any benefit to the vehicle industry, consumers, or the tire industry for standardized load ratings to be changed, and in this case in particular, to be increased by a regulation. We would like to provide a few comments on the role tire standards play in the transportation industry and, in particular, the determination of load ratings and the formulae, which we feel may be misunderstood and had been somewhat maligned by the agency in the Tire Pressure Monitoring System NPRM.

The primary purpose of an industry tire standard (e.g. TRA, ETRTO, JATMA) is to provide a means for a tire manufacturer to make a tire to be interchangeable dimensionally and to be able to carry the same load as another manufacturer's tire of the same size in the same type of service. The manufacturer can design its tire to whatever

performance levels the company desires (i.e.: endurance, traction, aesthetics, noise, etc.). Technical improvements and advances can be incorporated into new lines of tires of individual

manufacturers, but as long as the standardized tire designation is the same, the basic load and pressure should not change. We feel that it would be extremely chaotic and unmanageable if every time a technical advance is implemented by a tire manufacturer the standards were changed or a new sizing system adopted.

The fact that a certain tire size has had the same basic dimensions and load rating since its adoption as a "standard" is of great benefit to the transportation industry and helps assure that the proper tire is matched with the proper rim on the appropriate vehicle.

That a tire of a given tire size may have increased tread wear, different traction characteristics, etc., than the same size tire of another manufacturer, or another line of the same manufacturer, allows for a greater choice and benefit to the consumer.

When a factor is applied to change a tire load or inflation pressure for an application in a different service than the primary application of the tire, it essentially becomes a new standard. In the specific case in point, the industry standard for a passenger car tire on an SUV or Light Truck is 91% of the passenger car load at the same inflation pressure.

TRA reduced the load ratings for this application primarily because:

- the usage would be more severe than passenger car applications
- there would be greater lateral forces on the tires due to the higher center of gravity of the vehicle
- there would be greater likelihood of overloading

Consequently, the only logical option was to decrease the deflection by reducing the load at the same inflation pressure.

When the P-Metric program was developed, it was to replace the "alpha-numeric" tires primarily because of

- the request to have a metric, internationally compatible line of tires
- the desire to have a relatively higher inflation pressure for the same load to reduce tire deflection and provide the associated benefits
- the desire to reduce the slope of the load/pressure curve while keeping the same basic maximum load.

Thus, the P-metric formula was developed and the method for determining the load/pressure schedule for specific tires was approved.

Shortly after that time, the LT metric tires were standardized. They replaced previous light truck tires primarily to:

- replace the 16.5 LT tires (8.00-16.5LT, 8.75-16.5LT, etc.)
- have a metric, internationally compatible line of tires
- retain approximately the same carrying capacity and "higher" inflation pressures as the then current sizes (8.00-16.5LT, 8.75-16.5LT, etc.)

Thus, the LT-metric formula was developed and the method for determining the load/pressure schedule for specific tires was approved.

Both tire systems have been very satisfactory in serving the needs of the automotive industry.

However, since the development of the metric tires and especially in the last 10-15 years, the application of P-type tires to "non-passenger car" vehicles has dramatically increased. This is due to the "lower" inflation pressures of the P-Type tires and the relatively high load carrying capacity of these tires when compared to the LT tires at the same pressures.

Currently, depending on the specific size, a P-metric tire with the 1.10 load adjustment will carry from 25 % to 35 % more load at the same pressure than an LT tire. Eliminating the 1.10 factor would make the difference even greater. Frankly we thought that NHTSA would suggest increasing the 1.10 factor to a higher value since the performance of passenger car tires on light trucks and SUVs is apparently of considerable concern.

We strongly request that the 1.10 factor be retained as the adjustment when passenger car tires are used on light trucks, vans, SUVs and trailers.

Additionally, there are two areas that we would like to comment on in the proposed FMVSS 139, inflation pressures and load ratings.

S5.5(d) specifies that "The maximum permissible inflation pressure" shall be included with the tire markings and S5.5.3 (a) explains details of this marking.

We request that this marking be removed from the sidewall labeling. Tire inflation pressures are vehicle specific. Thus, this information should be obtained from the vehicle placard and/or vehicle owner's manual. As long as a maximum permissible pressure is stamped on the tire, consumers and others will continue to mis-use this information.

However, if this provision is retained, as in the proposal or some other form, there are three conflicts with current standards and practices that this regulation will create.

The first is that the pressure currently marked on the tire sidewall of Light Truck tires is not the "maximum permissible pressure". Additional pressure for special operating conditions has been common practice and will have to be recognized.

The second conflict with current standards is the "rounding" of the equivalent psi pressure as specified in S5.5.3(a). Currently FMVSS 109 has this same "rounding" procedure for passenger car tires, however FMVSS 119 does not specify this "rounding" procedure for light truck tires. The Tire and Rim Association established "rounding" standards for tires in compliance with the applicable Federal Rules. If FMVSS 139 now limits the "rounding" of equivalent psi to that specified in FMVSS 109, it will require the revision of all Tire and Rim Association pressure standards for light truck tires and the restamping of all light truck tire molds in the world being used to produce tires for sale in the United States, with no benefit to the consumer. If S5.5.3(a) in FMVSS 139 were

revised to read "Each marking of that inflation pressure pursuant to S5.5(d) shall be followed in parenthesis by the equivalent psi.", the current psi pressures stamped in passenger car tire and light truck tire molds would be acceptable.

The third point is that the pressures shown in S5.5.3 are for passenger car tires. If FMVSS 139 is going to require inflation pressure markings on tires, applicable light truck tire pressures will have to be added.

Also, S5.5(e) specifies that "The maximum load rating" shall be included with the tire markings and S5.5.3 (b) explains details of this marking. Marking the Load Index number on the tire, consistent with international standards and practices will provide a better means for correct tire replacement than marking the maximum load in kilograms and pounds.

However, similar to the inflation pressure marking, if this provision is retained, the "rounding" requirement of S5.5.3(b) is in conflict with current light truck tire standards. Again, FMVSS 119 does not specify this "rounding" procedure for light truck tire pound loads. The pound loads standardized by the Tire and Rim Association and used on light truck tires currently being produced are in compliance with FMVSS 119. If FMVSS 139 now limits the "rounding" of equivalent pound loads to that specified in FMVSS 109, it will require the revision of all Tire and Rim Association load standards for light truck tires and the restamping of all light truck tire molds in the world being used to produce tires for sale in the United States, with no benefit to the consumer. If S5.5.3(b) in FMVSS 139 were revised to read "Each marking of the tire's maximum load rating in kilograms shall be followed in parenthesis by the equivalent load rating in pounds.", the current pound loads stamped in passenger car tire and light truck tire molds would be acceptable.

In summary, we request:

- That the 1.10 factor be retained as the adjustment to passenger car tires on light trucks, vans, SUVs and trailers.
- That the provisions to mark the maximum permissible inflation pressure and maximum tire load ratings be removed. If these provisions are retained that the "rounding" of the customary unit not be specified.

Very truly yours,



J. F. Pacuit, Executive Vice President